AMSAT News Service Weekly Bulletins
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SB SAT @ AMSAT $ANS-233.01
MORE INFO ABOUT OSCARS

HR AMSAT NEWS SERVICE BULLETIN 233.01 FROM AMSAT HQ
SILVER SPRING, MD AUGUST 21, 1993
TO ALL RADIO AMATEURS BT
BID: $ANS-233.01

KITSAT-B: First Independently Built Korean Satellite

AMSAT-NA would like to correct a bulletin a few weeks ago with respect to KITSAT-B. The KITSAT-B satellite was NOT built at the Univeristy of Surrey but at the Korean Advanced Institute of Science and Technology (KAIST). The satellite was built entirely in Korea using an all-Korean team. Members of this team were trained at Surrey and built KITSAT-A (now known as UO-22) at Surrey; however KITSAT-B is a completely Korean effort. This independent effort is considered to be an important phase in the educational "technology transfer" between Surrey and KAIST.

POSAT-1: Possible Opportunities For Amaetur Experimentation

PoSAT-1 was built at Surrey by SSTL staff and a team of 4 engineers seconded from Portugese industry. PoSAT-1 has been built as a technology-transfer project between SSTL and a consortium of Portugese aerospace companies. The satellite carries an Earth imaging camera, a CCD Star sensor, a Trimble GPS receiver and a digital signal processing experiment with TMS320C25 and TMS320C30 processors. The standard on-board computer supporting standard PACSAT protocols will also be provided.

Although its primary mission is outside the amateur bands, Surrey is negotiating with the Portugese industrial consortium for PoSAT to operate in the amateur bands part ot the time. Such part time amateur access would allow standard UoSAT-OSCAR-22 equipped stations to receive pictures from the camera and data from the GPS experiment. It is also possible to provide high speed modulation through the DSP system, which will allow radio amateurs to develop the necessary RF and digital techniques to go beyond 9600 baud.

The PoSAT camera has the same optics as the KITSAT-A camera, but since PoSAT is to be at half of the altitude of KITSAT, resolution should be doubled. The narrow-angle camera should produce 200 meter resolution. Standard PACSAT Broadcast Protocol techniques will be used to download the images. The amateur community will be kept informed as negotiations with the Portugese Consortium continue. Mail from radio amateurs who think they might be interested in receiving PoSAT-1 in the amateur bands would be appreciated and might help in conducting these discussions. Please send your comments and suggestions to the following address:

Jeff Ward, K8KA/G0SUL
Surrey Satellite Technology
University of Surrey UoSAT Unit
Guildford, Surrey GU2 5XH
England

Or via Internet: k8ka@AMSAT.org

[The AMSAT News Service (ANS) would like to thank Jeff Ward K8KA/G0SUL for the information used in this bulletin.]

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SB SAT @ AMSAT $ANS-233.02
PHASE-3D STATUS REPORT

HR AMSAT NEWS SERVICE BULLETIN 233.02 FROM AMSAT HQ
SILVER SPRING, MD AUGUST 21, 1993
TO ALL RADIO AMATEURS BT
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WD4FAB Provides Latest Phase-3D Status Report & Request For Assistance

Dick Jansson (WD4FAB) AMSAT-NA VP for Engineering, reports that the assembly of the Engineering Structural Model for Phase 3-D is now nearing completion in Germany. As many of you know, Dick, along with a team from Weber State University, has been working on this critical task for the past month with Dr. Karl Meinzer (DJ4ZC) and Werner Haas (DJ5KQ) of AMSAT-DL. Their goal has been to confirm the form, fit and function of structural designs for the new satellite. Dick says that the effort has been a tremendous learning experience for all. It has also given everyone involved a much clearer vision of where and how we must proceed in the months to come in order to be ready for launch in 1996.

As this stage of the development draws to a successful close, and as a direct result of the process, Dick now foresees that some additional, and immediate, machining expertise for the spacecraft thermal structure will be required beyond that already being expertly provided by our Weber State University people. He's asked that an urgent request be made for some additional help with machining some of the structural parts for the spacecraft.

Anyone with "hands on" machining experience, particularly in the milling and fine finishing of metal parts, and who also has both the spare time and use of facilities to donate to the Phase-3D cause are welcome to volunteer. Anyone who would like to help, or knows of someone who can, please contact Dick Jansson (beginning August 24th) at (407) 644-9008, or fax him at (407) 644-9782.

[The AMSAT News Service (ANS) would like to thank Dick Daniels (W4PUJ) for the information used in this bulletin.]

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SB SAT @ AMSAT $ANS-233.03
AMSAT OPS NET SCHEDULE

HR AMSAT NEWS SERVICE BULLETIN 233.03 FROM AMSAT HQ
SILVER SPRING, MD AUGUST 21, 1993
TO ALL RADIO AMATEURS BT
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Current AMSAT Operations Net Schedule For AO-13

AMSAT Operations Nets are planned for the following times. Mode-B Nets are conducted on AO-13 on a downlink frequency of 145.950 MHz. If, at the start of the OPS Net, the frequency of 145.950 MHz is being used for a QSO, OPS Net enthusiasts are asked to move to the alternate frequency of 145.955 MHz

Date	UTC	Mode	Phs	NCS	Alt NCS
28-Aug-93	1830	B	157	WJ9F	VE2LVC
11-Sep-93	0730	B	159	VE2LVC	W9ODI
18-Sep-93	1515	B	96	N7NQM	W5IU

Any stations with information on current events would be most welcomed. Also, those interested in discussing technical issues or who have questions about any particular aspect of OSCAR statellite operations are encouraged to join the OPS Nets. In the unlikely event that either the Net Control Station (NCS) or the alternate do not call on frequency, any participant is invited to act as the NCS.

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Slow Scan Television on AO-13

SSTV sessions will be held on immediately after the OPS Nets a downlink on a Mode-B downlink frequency 145.960 MHz.

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SB SAT @ AMSAT $ANS-233.04
WEEKLY OSCAR STATUS REPORTS

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SILVER SPRING, MD AUGUST 21, 1993
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Weekly OSCAR Status Reports: 21-AUG-93

AO-13: Current Transponder Operating Schedule:
L QST *** AO-13 TRANSPONDER SCHEDULE *** 1993 Aug 14-Oct 25
Mode-B : MA 0 to MA 60 !
Mode-BS : MA 60 to MA 120 !
Mode-S : MA 120 to MA 145 !<- Mode-S transponder; B transponder is OFF
Mode-S : MA 145 to MA 150 !<- Mode-S beacon only
Mode-BS : MA 150 to MA 210 ! Blon/Blat 180/0
Mode-B : MA 210 to MA 256 !
Omnis : MA 170 to MA 15 ! Move to attitude 210/0 25-Oct-1993
Continuous up-to-date information about AO-13 operations is always available on the beacons at 145.812 MHz and 2400.646 MHz in CW, RTTY and 400 bps PSK. Also, these bulletins are also posted to INTERNET, ANS bulletins, Packet, PACSATs, etc., and can also be found in many international newsletters. [G3RUH/DB2OS/VK5AGR]

RS-10: WB2WPA reports excellent results at his QTH with RS-10. He notes that he has worked 12 states and a number of VE provinces in casual operating over the past few weeks. He installed an Advanced Receiver Research (ARR) 10M preamp, and he saw his signals rise to S-9+. Also, WB2WPA has seen good "over-the-horizon" results for about 1 minute before AOS and after LOS recently running 80 watts to a 15 element beam with horizontal polarization. Also, WC9C reports that the RS-10 transponder is working just fine. With the Solar Flux dropping below 100, Mode-A signals even during the day light hours are fairly strong. The transponder activity was very high last week with at least 3 DX stations heard. There was no message on the telemetry beacon this week, and the CW Robot was also working just fine. [WB2WPA & WC9C]

RS-12: GM4IHJ has been copying RS-12 well into the evenings in the UK while it is "sub-horizon" at the terminator over UA0. He notes that it is well worth the time for RS-12 operators to be looking for the satellite long before AOS and long after LOS and even on "out of range" passes to the north. If you can hear the 29.407 MHz beacon the chances are that the satellite transponder will hear your 21.210 - 21.250 MHz uplink. WC9C reports that RS-12 Mode-K transponder is working fine with lots of activity. With 15M dropping off as the solar flux falls, he says that there is alot less interference to the Mode-K uplink passband. At the end of the telemtry frame there was this test message which said: "Test test test RS3X QTH Kaluga" [GM4IHJ/G3IOR & WC9C]

AO-16: Operating normally. [WH6I]

UO-22: Operating normally. [WH6I]

KO-23: Operating normally. [WH6I]

The AMSAT NEWS Service (ANS) is looking for volunteers to contribute weekly OSCAR status reports. If you have a favorite OSCAR which you work on a regular basis and would like to contribute to this bulletin, please send your observations to WD0HHU at his CompuServe address of 70524,2272, on INTERNET at wd0hhu@amsat.org, or to his local packet BBS in the Denver, CO area, WD0HHU @ W0LJF.#NECO.CO.USA.NOAM. Also, if you find that the current set of orbital elements are not generating the correct AOS/LOS times at your QTH, PLEASE INCLUDE THAT INFORMATION AS WELL. The information you provide will be of value to all OSCAR enthusiasts.

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